

# Dvorak Developments

Dvorak Developments #49 (Volume 14, #3) — Spring 1987

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## EZ-50 Typewriter Wins *DvDv* 'Product of the Year' Award

The Silver Reed EZ 50, the first mass produced typewriter with the ability to switch between Qwerty and Dvorak, was awarded *Dvorak Developments*' "Most Significant Dvorak Product of 1986" award on April 30<sup>th</sup>. The award is given to the product which made the greatest impact on the switch to the Dvorak keyboard during the year.

The EZ 50 is a feature-laden, office-caliber electronic typewriter. The basic unit features automatic carriage return, centering, flush right, boldface, and a 500 character correction key. By plugging in optional cartridges, you can add a memory, an LCD display, a computer printer interface, and a 90,000 word dictionary.

Introduced at the National Office Machine Dealer's Association show in July 1986, the EZ-50 is still the only manufactured machine with both Dvorak and Qwerty layouts built in. Silver Reed has made it a point to emphasize the machine's Dvorak capability to its dealers. Freelance Communications, which publishes *Dvorak Developments*,

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*The award is given to the product which made the greatest impact on the switch to the Dvorak keyboard during the year.*

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has assisted Silver Reed in educating dealers about the keyboard so the feature can be explained properly to potential buyers. Silver Reed's dealer newsletter, *The Silver Bulletin*, reminded the dealers that for dealers "who sell to local, state and Federal agencies and schools, (the Dvorak capability) is important because many of these groups want Dvorak/Qwerty convertible machines. These organizations buy a lot of typewriters... any bid that requires the Dvorak spec can be yours."

The retail base price of the EZ-50 is \$700, and it is stocked by most Silver Reed dealers.

## From the Editor's Keyboard

by Randy Cassingham

### First Look

Maxi-Switch, the keyboard company who produces, among other keyboards, a Dvorak keyboard that works with both the PC and AT computers, has recently introduced two new programmable keyboards. To find out how well the new keyboards would work with Dvorak, we ordered one. We were hoping that a programmable keyboard would enable us to use Dvorak without having to load special

memory-resident Dvorak conversion software. The results were, unfortunately, not good.

Physically, the "Memory Pro" and the "Ultra Memory Pro" look the same. The difference is how they are programmed. The standard Memory Pro has circuitry inside the keyboard that allows you to put up to 49 keystrokes on several extra function keys across the top row — the keystrokes are stored in a PROM (Programmable Read Only Memory) inside the keyboard. Unfortunately, you cannot program the regular typewriter-area keys and therefore you cannot program the keyboard for a Dvorak layout.

The Ultra Memory Pro is programmed in a completely different way. Instead of the keystrokes being stored in a chip inside the keyboard itself, the Ultra Memory Pro comes with a program disk with memory-resident software to intercept the keystrokes from the keyboard and translate them to whatever you want — basically a "macro" program. But, compared to other macro programs on the market, the "Ultrakey" program is a sorry piece of software. It is not very powerful compared to our favorite (SmartKey), and is not too forgiving when you make mistakes. For instance, we tried to program a few keys to their Dvorak equivalents. But at one point, we made a mistake and were unable to get the key unprogrammed — we ended up not being able to use that key anymore. Then, while trying several of the command keys, the computer mysteriously "locked up" — that is, the system froze and would no longer accept ANY keystrokes from the keyboard. Even the system reset button on the keyboard didn't work, so we had to shut the computer off! Luckily, we weren't in the middle of a program at the time, so we didn't lose any important data. You might not be so lucky. Interestingly, though, the Smartkey program works very well with this keyboard, and is a good alternative.

Not everything is bad, however. The keyboard itself is very nice. Maxi-Switch is fairly well known for having a good "feel" on its keyboards, and they are well built (the contacts in the key switches, for example, are gold plated for high reliability). It's quiet, but has a positive response that typists will like. If the keys are too quiet for you, it also has an electronic key "click" that you can switch on and off, but it's so loud and tinny sounding that it gives you the impression you're in a video arcade; it's enough to drive a good typist batty. The bottom line: if what you want is a good replacement keyboard and you are already using satisfactory Dvorak conversion software, look into the Memory Pro. To get macro functions for it, get Smartkey; don't bother with the "Ultra" keyboard or its "Ultrakey" macro software. When it comes to Dvorak, the Memory Pro

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## Letters

### Qwerty: the Ancient Keyboard

It's grimly amusing to think that here, in the country that fathered the metric system, when it came to choosing keyboards the French swallowed the worst of the New World in a single gulp. Well... a gulp-and-a-half — it's true that Qwerty is spelled "Azerty" here — and French genius has added the piquant little novelty of accents.

Moreover, the same stupid idea, with local inflections, conquered half of Europe. Is it possible it really takes a guillotine or a Boston Tea Party to dump old regimes? If the example of the Canadian government's recent disastrous attempts at "metrification" can be used as a ...er... yardstick, the answer may well be a resounding "Yes!"

The gene responsible for that cry from the heart, "God spare us from all change", has impeccable lineage. When I wanted to practice the Dvorak keyboard, I often typed from one volume or another of *The Oxford Junior Encyclopedia*, given to me eons ago by a thoughtful English godfather. (Nothing to do with improving my mind; the volumes simply offered the attractions of large type and spines that actually allow them to lie open at a chosen page. As you've undoubtedly observed, put most books near a computer, open them, and a battle royal bursts out with flipping pages.)

I remember in the article on Ancient Egypt the author remarks that if there was a single trait that characterized that extraordinary, brilliant civilization, it was the overwhelming desire to be as reactionary, as tradition-bound as possible. It appears that while still a great world power, Egypt conceived an alphabet offering advantages similar to our own — a nominal number of practical shapes, capable of infinite expression. But millennia of chiselling and tracing complex hieroglyphics, coupled to a turn of mind that preferred to avoid change, relegated the potentially revolutionary conception of a simple Egyptian alphabet to an undeveloped footnote in history.

No doubt it's going a little too far to tartly equate chiselling hieroglyphics with the Qwerty keyboard, but it's always fascinating to see in action the visceral human antipathy towards change in any form, no matter how desirable.

Christopher Ross  
Paris

*Innovation has long seen difficult roads to successful implementation. Even Dr. Dvorak wasn't particularly surprised at the slow acceptance of his new keyboard design.*

*"It took 35 to 75 years for the railroads, steamships, radio, telephone, telegraph, airplanes, and yes, even the automobile to gain general acceptance after they were invented and/or developed," he said. "(And) each was opposed to those who had investments in the status quo." (Quoted in *The Dvorak Keyboard*, p49). Based on that timing, the Dvorak keyboard has until the year 2007 to catch on. We are working on a more in-depth article on how even very logical innovations can take a long time to diffuse into civilization. Look for it in an upcoming issue.*

## Customize

### your keyboard to Dvorak

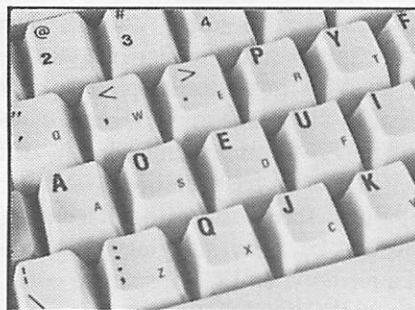
Convert your keyboard to reflect the Dvorak layout. These rigid plastic adhesive labels are imprinted with the Dvorak key legend in bold black in the upper left hand corner and the Qwerty legend in smaller black print in the lower right-hand corner of the keytop.

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Your comments are welcome. Please address your letters to Randy Cassingham, Editor, *Dvorak Developments*, PO Box 1895, Upland CA 91785. While not all letters can be personally answered, the most interesting will be printed here after being edited for length and clarity.

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keyboards are not any better at giving you a Dvorak layout than any other Qwerty keyboard — you still need good conversion software to give the keyboard a Dvorak layout.

By the way, a call to Maxi-Switch (who has moved from Minneapolis to Phoenix, Arizona, as mentioned in the Product Alerts section) confirms that they do indeed still offer the Dvorak layout PC/AT keyboard that was reviewed in the Spring 1986 issue. But be aware that they apparently don't have these keyboards in stock — they told me the delivery time is eight weeks. Luckily, Prelco has that taken care of that for you — see the Product Alerts section in this

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*A notice in Compute! magazine loaded our mailbox with several hundred self-addressed stamped envelopes from readers wanting more information.*

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issue. Prices: Memory Pro, \$175; Ultra Memory Pro, \$250; PC/AT replacement Dvorak keyboard, \$150.

### DIF and DvDv — Not the Same Thing

We often get letters from people asking about their membership in the Dvorak International Federation. DIF is a completely separate business that is not in any way related to *Dvorak Developments*. They offer telephone consulting services regarding the Dvorak for a membership fee. If you have questions about DIF, contact them directly: PO Box 128, Brandon VT 05733.

In the past, DIF members were sent copies of *Dvorak Developments* as a part of their membership benefits — those subscriptions were paid for by DIF. This is no longer true; DIF has discontinued paying for these subscriptions. If you are a DIF member and wish to continue to receive *Dvorak Developments*, you must now subscribe directly.

### Where to find "Dvorak PC"

Shortly after the last issue was published mentioning "Dvorak PC", a free informational program that runs on IBM PCs and compatibles, the CompuServe Information Service deleted it from their data library after deciding we put it there to promote ourselves rather than the keyboard. While we don't think that is true — it has a lot of useful information and made it explicitly clear that we wanted no compensation for the use of Dvorak PC — the fact remains that it is now gone from CompuServe. The good news is that Dvorak PC is now available on General Electric's "GENie" information service. It is file number 3945 (under the name "DVORAK.ARC") in the IBM library.

If you cannot gain access to GENie, cannot find Dvorak PC on any free computer "bulletin boards", or you simply don't have a modem on your PC, you can get Dvorak PC from Freelance Communications for \$5 (for the disk, duplication, and shipping). We're sorry if you tried to get it from CompuServe and could not find the program. The program is a good general introduction to the Dvorak keyboard — we wrote it to answer the basic questions we are commonly asked.

New from Freelance Communications:

## Dvorak on your IBM PC and Compatibles

PCKey gives you a low cost way to bring the Dvorak keyboard to your IBM PC or "true" compatible. And PCKey works with your existing keyboard and almost all of your existing software.

With PCKey, you can set up your keyboard for any variant of the Dvorak, including the ANSI standard, DSK, one-hand (left or right), or any custom layout!

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### Educators Go at it Again

A year ago, the educational journal *Technical Horizons in Education*, better known as the *THE Journal*, ran a small informational item about *Dvorak Developments* in their "new publications" section. The item generated more than five hundred inquiries from educators wanting to know more about the Dvorak. This year, intrigued by our article about how handicapped typists can make better use of keyboard machines by switching to Dvorak ("Dvorak helped Me Overcome Dyslexia" in the Winter 1986 DvDv), *THE* ran another notice. The response this time has been even higher.

If you work at an educational institution or in the training center of a corporation, you should be getting this journal. The price is right — it's free if you qualify. Write to them at PO Box 15126, Santa Ana CA 92705 for a qualification form.

We're proud that other large circulation magazines have also taken note of *Dvorak Developments*. A notice in *Compute!* magazine loaded our mailbox with several hundred self-addressed stamped envelopes from readers wanting more information. And a similar item in *Family Computing's* May issue is showing similar results. All who ask for information get, at a minimum, a free sample issue

*Continued on Page 4*

*Continued from Page 3*

of this newsletter. The advertisements, product alerts and our free Product List, which lists all of the Dvorak products from past issues, all show these readers where to turn for more Dvorak information. We are happy to have responded to more than 3,000 requests for Dvorak information over the past two years.

If you know someone who wants information on the Dvorak, just send us their address and we'll send a sample of *Dvorak Developments*. It's our way of letting people in on an easier and better way to use machines with keyboards.

### Keep Sending those Clippings

With the thousands of magazines published today, no one can keep track of them all. So we especially appreciate it when readers send clippings of articles on the Dvorak that appear in the publications they read. My thanks to those who have done it in the past. To encourage you to keep it up, I'll add an issue to the subscription of any reader who sends in a clipping that we don't already have. (If you're not a subscriber, I'll send a free copy of the next issue.) We really need the clippings — we didn't get any for this issue!

## Keyer

For Tandy/Radio Shack Models 100, 102 & 200 and NEC 8201A Laptop Computers

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**The Covington Group**  
4519 Perry Avenue N  
Minneapolis, Minnesota 55422

## Product Alerts

We lost track of the **Covington Group** when they moved from New York, but finally found them at their new address: 4519 Perry Avenue N, Minneapolis MN 55422. They are the makers of "Keyer", a program to switch the keys of the Radio Shack Model 100 and 102, and the NEC 8201A, laptop computers to Dvorak. The \$19.95 program was reviewed in the Winter 1985 issue.

**Harley Templeton**, 7807 Lazy Lane, Austin TX 78757-1415, offers a Dvorak conversion program for Texas Instruments Pro and Business Pro (when run in the TI mode) computers. The cost is \$14.95.

**Paragon Courseware** has changed their name to **Paragon Concepts, Inc.** Their address remains 4954 Sun Valley Road, Del Mar CA 92014, (619) 481-1477, and they've added a toll-free order line: (800) 621-5640. Their popular "MacQwerty" program for the Macintosh has been upgraded to work with the new Macintosh SE, and the package now includes keytop overlays. The price is \$45.

**Prelco**, 14202 Galy Street, Tustin CA 92680, (714) 544-3041, has announced that they will be stocking the popular Maxi-Switch replacement keyboard for IBM PC/XT/AT computers and compatibles. The Maxi-Switch factory said direct orders to them take about eight weeks to fill, so this is where to go if you're in a hurry. Prelco's \$140 price is \$10 off list, and it includes shipping.

**Tri-Mike Network East**, 33 Virginia Drive #22, Monroe MI 48161, has announced that their Dvorak Keyboard System is now running on the NEC 8201A laptop computer. The program is already available for the similar Radio Shack models. It is \$24.95.

## MacQWERTY™ \$45<sup>00</sup>

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## Product Overviews

Product overviews are detailed descriptions of Dvorak-related products. The regular "for sale" version of the product is tested, then described in full so that readers can make intelligent choices on what products fit their needs. Opinions expressed in the overview are those of the author.

### SmartKey II Plus and XtraKey — New Life for CP/M Computers

*Reviewed by Lindsey McWilliams*

**Description:** Keyboard macro/redefinition software for CP/M and CP/M+ computers, not copy protected.

**Suppliers:**

- SmartKey II Plus, Software Research Technologies, 2130 S. Vermont Avenue, Los Angeles CA 90007, (800) 824-5537, in Calif. (213) 737-7663. \$49.95.
  - XtraKey, Xpert Software, 8865 Pollard Ave., San Diego, CA 92123, (619) 268-0112. \$29.95.
- Machine used for test: Osborne O-1.

As a former purveyor of computers and software, I was often asked what I thought of CP/M systems. My standard response was rife with conflicting emotions since I have two Osborne O-1s and an MS-DOS computer: "When CP/M machines work," I'd tell my clients, "they're fine. But parts and software are getting harder to find."

Software Research Technologies and Xpert Software can't do much about the hardware side of the CP/M problem but their keyboard macro/redefinition programs offer interesting and useful complements to CP/M software. Just how interesting and useful depends on your commitment to CP/M and the Dvorak keyboard.

Both of these programs are designed to allow users to redefine keys and compress multiple keystrokes into a single key (called macros). Stored routines can be saved in definition files that can be loaded before particular programs; thus a WordStar definition file can be different from one for SuperCalc or dBASE II. Both programs come with pre-configured Dvorak definition files that work with WordStar, the grandpa of word processing programs. Our focus here is the ability of these programs to work with the Dvorak keyboard in WordStar.

SmartKey has been around longest and is well loved by several of my MS-DOS colleagues. On the CP/M front the only complaint I have heard is about the program's inability to print a file and still edit another file while using

### Tandy 100/102/200-NEC 8201

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See article in P100 magazine (July '86)

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WordStar. I did not find this to be a problem with this version of SmartKey.

To get to the heart of the matter, which program is best? Speaking from a WordStar-Dvorak perspective, XtraKey gets the nod. Here's why.

First, WordStar requires dozens of Control key (abbreviated ^) sequences to do much of anything; for example, saving a file involves three keys: ^Kd. While SmartKey redefines the typing keyboard, Control-based keys are in their original Qwerty locations. This causes a bit of psychomotor schizophrenia trying to keep key locations straight. The ^Kd becomes ^Ne in the Dvorak layout.

Second, SmartKey's quick key redefinitions revert to the Qwerty key location during the defining phase. In SmartKey, keys are redefined by pressing the Escape key and the key to be redefined; a prompt then appears at the bottom of the screen asking for the new definition of the chosen key. As with Control keys, these redefinitions show up in their Qwerty locations rather than the Dvorak mode in which you are typing.

Third, SmartKey doesn't completely redefine all keys to work with the Caps Lock key. This seems to be part of the previous pattern in that SmartKey can't overcome common keyboard logic. In this case, the Caps Lock key normally

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*Lindsey McWilliams is a Systems Analyst for the county of Humboldt (Calif.) and is a partner in Applied Research Associates, a public opinion polling and consulting firm. A former newspaper editor, he has written articles for a wide variety of magazines and developed training materials for computer and communication systems.*

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doesn't work on the top row number keys (which isn't a concern here) and these punctuation marks: ? < > : on the top, and / , . ; on the bottom.

It's confusing to look at and when SmartKey shifts into the Dvorak mode, those keys become Z, W, V, and S, respectively although you can't get those capital letters with the Caps Lock key. For those of you who don't type with the Caps Lock key this probably isn't an issue. Something here I happen to like involves a corollary to this idiosyncrasy. When the W and E keys become the comma and period, you get the comma and period when you type in Caps, just like on a typewriter, instead of the and signs.

Fourth, XtraKey provides a toggle that lets you shift from Qwerty to Dvorak and back. This isn't much of a feature for a completely converted Dvorak typist, but for

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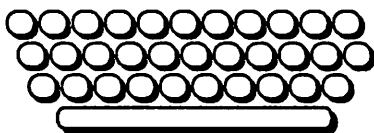
*All of this tilts the scales in favor of XtraKey; for the serious or aspiring Dvorak user in the CP/M environment, it is the keyboard redefinition program of choice.*

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those of us floundering in the twilight zone between the two it's very welcome.

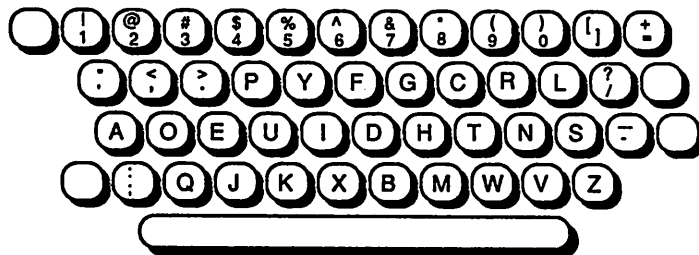
All of this tilts the scales in favor of XtraKey; for the serious or aspiring Dvorak user in the CP/M environment, it is the keyboard redefinition program of choice. But I still like SmartKey. XtraKey seems a bit more complicated than SmartKey and thus takes a little longer to learn. This may be due to my learning SmartKey first or the verbose ramblings of the XtraKey manual (which friends have lauded for its "conversational" tone). For those who use CP/M computers and aren't fully committed to Dvorak, you may find SmartKey the friendlier of the two programs.

[Editor's note: The SmartKey program for the IBM PC (and its clones) is very much different than the SmartKey for CP/M computers. For a review of the Dvorak applications of MS-DOS SmartKey, see the Summer 1986 issue of DvDv. Also, both CP/M SmartKey and XtraKey have special enhanced versions for the Kaypro, which supports (among other things) more sophisticated screen functions. Unfortunately, we don't have access to Kaypro machines to test these advanced features.]



## Corrections and Amplifications

In the last issue, we reviewed Prelco's "DV Switcher", a Dvorak upgrade to the Commodore 64 computer. All the information in the review was correct, but the headline read "DV Typer: Dvorak on the Commodore 64". DV Typer is another of Prelco's products and is not directly related to DV Switcher. We apologize for any confusion the headline caused.



Dvorak Keyboard  
Conforms to ANSI Standards

## Back Issues

- Summer 1986. AEtna managers learning Dvorak. Virginia Russell on Dvorak one-handed keyboards. Randy Cassingham's column on the increased interest in the Dvorak from many sectors. Information on the telephone company's use of Dvorak. Profile on Dvorak speed demon Barbara Blackburn. Product overview on SmartKey (keyboard macro/redefinition software for IBM). 4 bibliographic entries.
- Fall 1986. Randy Cassingham's column on the Silver Reed EZ-50 Dvorak-capable typewriter and editorial on how some companies don't promote their product's Dvorak capabilities. Product overviews on Keyboard Master and Typing Made Easy (typing tutorial programs). Listings of 2 new Dvorak products. 2 bibliographic entries. Very limited supply.
- Winter 1986. "Dvorak Helped Me Overcome Dyslexia". Randy Cassingham's column on the Dvorak keyboard for handicapped typists, interest in the Dvorak by Professional Secretaries International, the increase in the availability of Dvorak keyboards on typing equipment, and "Dvorak PC". Product overview on DV Switcher (conversion hardware for the Commodore 64). An item on how notes about the Dvorak are appearing in popular books. One new product listing, 3 bibliographic notes.

Back issues are \$2 each, postage included. All issues listed are 8 pages. Order from Freelance Communications, PO Box 1895, Upland CA 91785.

# The Dvorak Keyboard

"This is one of the most fascinating books I've had the pleasure to read lately. Cassingham really did his research on this book. The detailed appendix with its listing of the many products available that support the keyboard is worth the price of the book in itself." — *Mark Nolan, Information Marketing newsletter*

"This book will help to answer the basic questions frequently asked about the Dvorak keyboard." — *Virginia Russell, President, Dvorak International Federation*

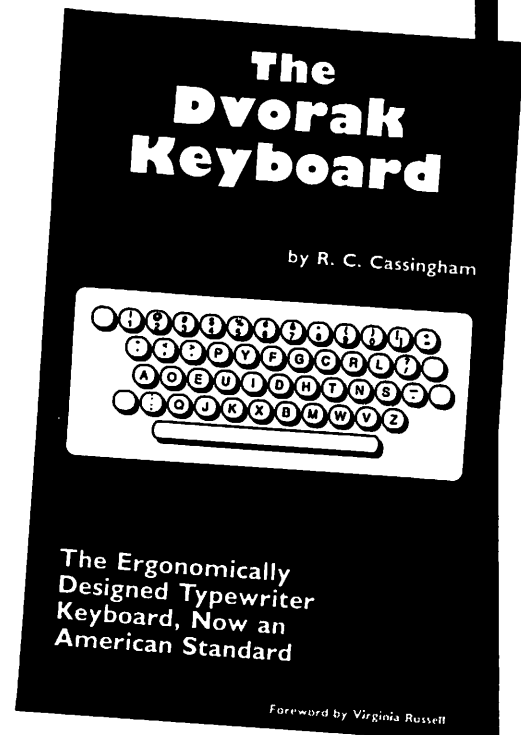
"This country needs many millions of these books. It ought to be required reading in high schools, colleges, and business and vocational schools." — *Belmont Adams, Scarborough, Maine*

***The Dvorak Keyboard*** will answer your questions about the Dvorak, or we'll give you your money back.\* Written by **Dvorak Developments** editor **Randy Cassingham**, the book includes:

- ✓ A clear explanation of the logical design and evolution of the Dvorak
- ✓ No nonsense information on how to convert
- ✓ Proof of Dvorak's superiority over Qwerty
- ✓ The many factors that allowed Qwerty to become entrenched as the 'standard' keyboard, and why it took until now for Dvorak to become popular
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### Going Out of Business Sale

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\$175 (plus \$15 to pack and ship). This is way under  
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Dvorak books, charts, etc. Send SASE for list.

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### Free Listing of Dvorak Products

We've compiled a listing of Dvorak products from the  
pages of *Dvorak Developments*. For a free copy, send a  
self-addressed, stamped business-sized envelope to Dvorak  
Products, PO Box 1895, Upland CA 91785. In July, a  
heavily updated list will be issued, including an index of  
all back issues of Dvorak Developments.

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### Dvorak Developments

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